

1 **SERVO SYNCHRONIZATION VALIDATION TECHNIQUES BASED ON BOTH**
2 **SERVO SYNCH MARKS AND WEDGE IDENTIFIERS IN A ROTATING MEDIA**
3 **STORAGE DEVICE**
4

5 **ABSTRACT**

6 Disclosed is a rotatable media storage device (RMSD) connectable to a host. The RMSD
7 include a movable head to perform track following, a disk, and a synch mark detection circuit.
8 The disk includes a circumferential track that has a plurality of embedded servo wedges utilized
9 in track following. The synch mark detection circuit has a first detection mode and a second
10 detection mode. In the first detection mode, the synch mark detection circuit detects a servo
11 synchronization signal based on the head reading a SSM of a servo header of an embedded servo
12 wedge. In the second detection mode, the synch mark detection circuit detects a servo
13 synchronization signal based on the head reading a SSM and a wedge identifier of a servo header
14 of an embedded servo wedge. The wedge ID is utilized in conjunction with the SSM to validate
15 the servo synchronization signal.